



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,862	08/05/2003	Michael J. DeLuca	FN101-CIP	1067
30349	7590	06/06/2007	EXAMINER	
JACKSON & CO., LLP 6114 LA SALLE AVENUE #507 OAKLAND, CA 94611-2802			GILES, NICHOLAS G	
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
06/06/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/635,862	DELUCA ET AL.
Examiner	Art Unit	
	Nicholas G. Giles	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 March 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-108 is/are pending in the application.
4a) Of the above claim(s) 42-73 and 84-108 is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-41 and 74-83 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 05 August 2003 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-41 and 74-108 and Species I, claims 31-41 in the reply filed on 03/25/2007 is acknowledged.

Drawings

2. The drawings are objected to because Figs. 7 and 9 are not legible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims **5-8, 10-18, 20-23, 25-28, 30, 32-41, 78-81, and 83** are objected to because of the following informalities: These claims are missing linking words(s) such as "further comprising" or "wherein said" etc. that are used to grammatically link the current claim to the parent claim. Appropriate correction is required.

4. Claim **9** is objected to because of the following informalities: The limitation "said analysis for correction" is not previously mentioned and therefore is there is no antecedent basis for limitation in the claim. Also the "marking" is stated being done on the external device as well as the image acquisition device. For examination purposes the "marking" will be assumed to be preformed on the external computational device in association with the post-processing step. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
6. Claims **3 and 76** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

invention. There is no support in the specification to show that the pixel analysis is done before the metadata analysis.

7. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. "Marking" is stated being done on the external device and the image acquisition device. The way the claim is written this is not possible. For examination purposes the "marking" will be assumed to be preformed on the external computational device in association with the post-processing step.

Double Patenting

8. Applicant is advised that should claim 32 be found allowable, claim 36 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 74 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 15 of copending Application No. 10/635918. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '918 claim is only different by stating that things are done digitally. Performing operations in a digital manner in a digital camera is inherent and therefore analyzing the metadata in a digital environment is an obvious modification to the claim.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-2, 4, 6, 11-12, 18-19, 21-22, 24, 26-27, 29, 74-75, 78, and 80-82 are rejected under 35 U.S.C. 102(e) as being anticipated by Matama (U.S. Patent No. 7,042,501.

Regarding claim 1, Matama et al. discloses:

A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image (eyes, etc.), the method comprising: (a) analyzing meta-data information including image acquisition device-specific information (7:52-8:38, 13:15-31 and Fig. 3); and (b) determining, based at least in part on said meta-data analysis, whether one or more regions within said digital image are suspected as including red eye artifact (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 2, see the rejection of claim 1 and note that Matama et al. further discloses:

Analyzing pixel information within one or more regions suspected as including red eye artifact based on said meta-data analysis, and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis,

said pixel analysis being performed after said meta-data analysis (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 4, see the rejection of claim 1 and note that Matama et al. further discloses:

Analyzing pixel information within said digital image, and determining whether one or more same or different regions are suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed independent of said meta-data analysis (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 6, see the rejection of claim 1 and note that Matama et al. further discloses:

Filtering being executed at least partially within a portable image acquisition device, having no photographic film (4:45-55, CCD).

Regarding claim 11, see the rejection of claim 1 and note that Matama et al. further discloses:

Lens being used to capture the image, said meta-data information comprising focal length of the lens at the time of acquisition (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 12, see the rejection of claim 11 and note that Matama et al. further discloses:

Meta-data information further comprising focusing distance of the lens at time of acquisition (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 18, see the rejection of claim 11 and note that Matama et al. further discloses:

Determining operation including a probability determination process based upon a plurality of criteria (liable for redeye to exist, 13:15-31).

Regarding claim 19, see the rejection of claim 11 and note that Matama et al. further discloses:

Adjusting a pixel color within any of said regions wherein red eye artifact is determined (8:4-26); and outputting image data to a printer (8:39-44).

Regarding claim 21, see the rejection of claim 11 and note that Matama et al. further discloses:

Meta-data information comprising information describing conditions under which the image was acquired (13:15-31).

Regarding claim 22, see the rejection of claim 21 and note that Matama et al. further discloses:

Meta-data information comprising an indication of whether a flash was used when the image was acquired (13:15-31).

Regarding claim 24, see the rejection of claim 21 and note that Matama et al. further discloses:

Analyzing pixel information within one or more regions (eyes) suspected as including red eye artifact based on said meta-data analysis, and determining whether any of said one or more suspected regions

continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed after said meta-data analysis (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 26, see the rejection of claim 21 and note that Matama et al. further discloses:

A lens being used to capture the image, said meta-data information comprising focal length of the lens at the time of acquisition (13:15-31).

Regarding claim 27, see the rejection of claim 26 and note that Matama et al. further discloses:

Meta-data information further comprising focusing distance of the lens at time of acquisition (13:15-31).

Regarding claim 29, see the rejection of claim 21 and note that Matama et al. further discloses:

Adjusting a pixel color within any of said regions wherein red eye artifact is determined (8:4-26); and outputting image data to a printer (8:39-44).

Regarding claim 74, Matama et al. discloses:

A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image (eyes etc.), the method comprising: (a) analyzing meta-data information including information describing conditions under which the image was acquired (7:52-8:38,

13:15-31 and Fig. 3); and (b) determining, based at least in part on said meta-data analysis, whether one or more regions within said digital image are suspected as including red eye artifact (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 75, see the rejection of claim 74 and note that Matama et al. further discloses:

Analyzing pixel information within one or more regions suspected as including red eye artifact based on said meta-data analysis, and determining whether any of said one or more suspected regions continue to be suspected as including red eye artifact based on said pixel analysis, said pixel analysis being performed after said meta-data analysis (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 78, see the rejection of claim 74 and note that Matama et al. further discloses:

Filtering method being executed within a portable image acquisition device, having no photographic film (4:45-55, CCD).

Regarding claim 80, see the rejection of claim 74 and note that Matama et al. further discloses:

Meta-data information describing the conditions under which the image was acquired comprising an indication of whether a flash was used when the image was acquired (13:15-31).

Regarding claim 81, see the rejection of claim 74 and note that Matama et al. further discloses:

Determining whether said regions are actual red eye artifact being performed as a probability determination process based upon a plurality of criteria (liable for redeye to exist, 13:15-31).

Regarding claim 82, see the rejection of claim 74 and note that Matama et al. further discloses:

Adjusting a pixel color within any of said regions wherein red eye artifact is determined (8:4-26); and outputting image data to a printer (8:39-44).

13. Claims 31-34, and 36-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Silverbrook (U.S. Pub. No. 2004/0032526).

Regarding claim 31, Silverbrook discloses:

A method of filtering a red-eye phenomenon from an acquired digital image comprising a multiplicity of pixels indicative of color, the pixels forming various shapes within the image (eyes, face), the method comprising: (a) analyzing meta-data information including a spectral response curve of a sensor of an acquisition device with which the image was acquired (¶0026, spectral nature which has a response curve); and (b) determining, based at least in part on said meta-data analysis, whether

one or more regions within said digital image are suspected as including red eye artifact (¶0023-0026).

Regarding claim 32, see the rejection of claim 31 and note that Silverbrook further discloses:

Meta-data information comprising a color transformation from raw sensor pixel values to saved image pixel values (¶0025-0026).

Regarding claim 33, see the rejection of claim 31 and note that Silverbrook further discloses:

Determining operation including a probability determination process based upon a plurality of criteria (¶0023-0026, flash, determination of eye, faces).

Regarding claim 34, see the rejection of claim 31 and note that Silverbrook further discloses:

Meta-data information comprising acquisition device-specific information (¶0023-0026, flash used, spectral nature of flash).

Regarding claim 36, see the rejection of claim 31 and note that Silverbrook further discloses:

Meta-data comprising a color transformation from raw sensor pixel values to saved image pixel values (¶0025-0026).

Regarding claim 37, see the rejection of claim 31 and note that Silverbrook further discloses:

Color values of said pixels indicative of red eye color being calculated based on a spectral response of said red eye phenomenon (¶0025-0026).

Regarding claim 38, see the rejection of claim 31 and note that Silverbrook further discloses:

Spectral response of said red eye phenomenon being according to illumination by a spectral distribution of a camera flash unit (¶0025-0026).

Regarding claim 39, see the rejection of claim 31 and note that Silverbrook further discloses:

Spectral distribution of said camera flash unit being as recorded by said sensor of said acquisition device with which said image was acquired (¶0023-0026).

Regarding claim 40, see the rejection of claim 31 and note that Silverbrook further discloses:

Determining operation including comparing pixels indicative of red eye color and a multiplicity of pixels forming various shapes (¶0023-0026, eye, faces).

Regarding claim 41, see the rejection of claim 31 and note that Silverbrook further discloses:

Pixels indicative of red eye color being calculated based on an inverse transformation of said color transformation from raw sensor pixel values to saved image pixel values (¶0024-0026).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 5, 7-10, 13-17, 20, 23, 25, 28, 30, 77, 79, and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matama et al. in view of Velazquez et al. (U.S. Pub. No. 2003/0161506).

Regarding claim 5, see the rejection of claim 1 and note that Matama et al. is silent with regards to using anthropometrical data. Velazquez et al. discloses this in ¶0013-0041. Velazquez et al. discloses in ¶0041 that an advantage to using anthropometrical data is that when a face candidate region score based on the data is below a threshold the region doesn't have to be evaluated for redeye. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama's data include anthropometrical data.

Regarding claim 7, see the rejection of claim 1 and note that Matama et al. is silent with regards to post-processing on an external device. Velazquez et al. discloses this in ¶0042. An advantage to post-processing on an external device is that an external device with more advanced capabilities can be used to manipulate the image then the camera has available. For this reason it would have been obvious to one of

ordinary skill in the art at the time the invention was made to have Matama include post-processing on an external device.

Regarding claim 8, see the rejection of claim 7 and note that Matama et al. further discloses:

Some or all of said meta-data analysis being performed on said image acquisition device (7:52-8:38, 13:15-31 and Fig. 3).

Regarding claim 9, see the rejection of claim 8 and note that Velazquez et al. further discloses marking the regions suspected as containing red eye artifact based on analysis on the external device in ¶0013-0041. An advantage to marking the regions suspected as containing red eye artifact based on analysis on the external device is that an external device with more advanced capabilities can be used to manipulate the image then the camera has available. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include marking the regions suspected as containing red eye artifact based on analysis on the external device.

Regarding claim 10, see the rejection of claim 7 and note that meta-data analysis on the image acquisition device can be found in the rejection of claim 1. Velazquez et al. further discloses in ¶0013-0041 meta-data analysis and suspected regions determining at the post-processing step on the external device. An advantage to meta-data analysis and suspected regions determining at the post-processing step on the external device is that an external device with more advanced capabilities can be used to manipulate the image then the camera has available. For this reason it would have

been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include meta-data analysis and suspected regions determining at the post-processing step on the external device.

Regarding claim 13, see the rejection of claim 11 and note that Matama et al. is silent with regards to meta-data including sensor size. Velazquez et al. discloses this in ¶0013-0041 when talking about sensor resolution of pixels per inch. Velazquez et al. discloses in ¶0026 and 0040-0041 that using this data is advantageous in calculating the expected face size, which is used for determining whether red-eye correction is necessary. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include meta-data including sensor size.

Regarding claim 14, see the rejection of claim 13 and note that Velazquez et al. further discloses calculating the expected size of red eye artifact based on metadata including acquisition device information in ¶0013-0041 where the expected face size is determined which is where red eye is expected to be present. Velazquez et al. discloses in ¶0026 and 0040-0041 that calculating the expected size of red eye artifact based on metadata including acquisition device information is advantageous because it can be determined whether or not red eye correction should be performed based on the calculated size. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include calculating the expected size of red eye artifact based on metadata including acquisition device information.

Regarding claim 15, see the rejection of claim 14 and note that Velazquez et al. further discloses:

Calculated expected size of said red eye artifact being defined as a range with a density probability function, the range being calculated based on depth of field (¶0026, ¶0013-0041).

Velazquez et al. discloses in ¶0026 and 0040-0041 that using this data is advantageous in calculating the expected face size, which is used for determining whether red-eye correction is necessary. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include calculating the expected size of the red eye artifact being defined as a range with a density probability function, the range being calculated based on depth of field.

Regarding claim 16, see the rejection of claim 13 and note that Velazquez et al. further discloses:

Calculated expected size of said red eye artifact being defined as a range with a density probability function, the range being estimated (¶0029, ¶0037, ¶0013-0041).

Velazquez et al. discloses in ¶0026 and 0040-0041 that using this data is advantageous in calculating the expected face size, which is used for determining whether red-eye correction is necessary. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include calculating expected size of said red eye artifact being defined as a range with a density probability function, the range being estimated.

Regarding claim 17, see the rejection of claim 13 and note that Velazquez et al. further discloses:

Calculated expected size of said red eye artifact being defined as a range with a density probability function, said meta-data comprising anthropometrical data, and said range being determined by a statistical distribution of said anthropometrical data (¶0029, ¶0037, ¶0013-0041).

Velazquez et al. discloses in ¶0026 and 0040-0041 that using this data is advantageous in calculating the expected face size, which is used for determining whether red-eye correction is necessary. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include calculating expected size of the red eye artifact being defined as a range with a density probability function, the meta-data comprising anthropometrical data, and the range being determined by a statistical distribution of the anthropometrical data.

Regarding claim 20, see the rejection of claim 19 and note that Matama et al. is silent with regards to adjusting the pixel color in a printer. Velazquez et al. discloses this in ¶0042-0043. Velazquez et al. discloses in ¶0043 that an advantage to adjusting color in a printer is that users review results and interact to accept or reject the result. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include adjusting the pixel color in a printer.

Regarding claim 23, see the rejection of claim 21 and note that Matama et al. is silent with regards to using the aperture as meta-data. Velazquez et al. discloses this in ¶0013-0041. Velazquez et al. discloses in 0040-0041 that using the aperture is

advantageous because it can be determined whether or not red eye correction should be performed based on the calculated size. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include the aperture as meta-data.

Regarding claim 25, see the rejection of claim 21 and note that Matama is silent with regards to using anthropometrical data. Velazquez et al. discloses this in ¶0013-0041. Velazquez et al. discloses in ¶0041 that an advantage to using anthropometrical data is that when a face candidate region score based on the data is below a threshold the region doesn't have to be evaluated for redeye. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama's data include anthropometrical data.

Regarding claim 28, see the rejection of claim 26 and note that Matama is silent with regards to meta-data including sensor size. Velazquez et al. discloses this in ¶0013-0041 when talking about sensor resolution of pixels per inch. Velazquez et al. discloses in ¶0026 and 0040-0041 that using this data is advantageous in calculating the expected face size, which is used for determining whether red-eye correction is necessary. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include meta-data including sensor size.

Regarding claim 30, see the rejection of claim 29 and note that Matama is silent with regards to adjusting the pixel color in a printer. Velazquez et al. discloses this in ¶0042-0043. Velazquez et al. discloses in ¶0043 that an advantage to adjusting color in

a printer is that users review results and interact to accept or reject the result. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include adjusting the pixel color in a printer.

Regarding claim 77, see the rejection of claim 74 and note that Matama is silent with regards to using anthropometrical data as meta-data. Velazquez et al. discloses this in ¶0013-0041. Velazquez et al. discloses in ¶0041 that an advantage to using anthropometrical data is that when a face candidate region score based on the data is below a threshold the region doesn't have to be evaluated for redeye. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama's meta-data include anthropometrical data.

Regarding claim 79, see the rejection of claim 74 and note that Matama et al. is silent with regards to post-processing on an external device. Velazquez et al. discloses this in ¶0042. An advantage to post-processing on an external device is that an external device with more advanced capabilities can be used to manipulate the image then the camera has available. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include post-processing on an external device.

Regarding claim 83, see the rejection of claim 82 and note that Matama is silent with regards to adjusting the pixel color in a printer. Velazquez et al. discloses this in ¶0042-0043. Velazquez et al. discloses in ¶0043 that an advantage to adjusting color in a printer is that users review results and interact to accept or reject the result. For this

reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Matama include adjusting the pixel color in a printer.

16. ³⁵ Claim ~~30~~ is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook in view of Matama et al. (U.S. Patent No. 7,042,501).

³⁵ Regarding claim ~~30~~, see the rejection of claim 31 and note that Silverbrook is silent with regard to using a plurality of criteria to determine red eye. Matama discloses this in 13:15-31. Matama et al. discloses in 13:53-65 that an advantage to using a plurality of criteria to determine red eye is that if the criteria suggest that red-eye doesn't exist then red eye correction processing can be bypassed and not performed. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Silverbrook use a plurality of criteria to determine red eye.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas G. Giles whose telephone number is (571) 272-2824. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc - Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGG



NGOO-YEN VU
SUPERVISORY PATENT EXAMINER